Advanced Disposal

July 13, 2018

Mr. Jeff Cown
Chief, Land Protection Branch
Environmental Protection Division
Georgia Department of Natural Resources
4244 International Parkway
Suite 104
Atlanta, GA 30354

RE: Response to Notice of Violation Issued to Advanced Disposal Services Eagle Point Landfill
Permit No. 058-012D, Forsyth County

Dear Mr. Cown:

Advanced Disposal Services Eagle Point Landfill (Advanced) is providing this response to the Notice of Violation (NOV) issued on June 22, 2018 by the Environmental Protection Division (EPD) of the Georgia Department of Natural Resources. In responding to this NOV, Advanced will discuss the observations that led Advanced to temporarily halt operations on May 17th at the Eagle Point Landfill (Site), measures taken based on these field observations and the survey data collected through that date, the efforts to stabilize the condition and measures that will be implemented going forward to mitigate the potential for future stability issues. We will then respond to the alleged Violations, the corrective actions requested by EPD, and the analysis included in the memorandum attached to the NOV.

In summary, Advanced believes that the slope stability issues can be attributed to pressures associated with perched liquid within the Cell 13 waste mass rather than the strength of the waste. Initial review supports a conclusion that the accumulation of liquid within the waste mass attributed to a decrease in the permeability of the waste within Cell 13, resulted in an increase in pore pressure and the subsequent stability issues. Beginning in 2014, Advanced has acted aggressively to implement engineering controls and continually improve operational measures to effectively manage the waste streams that create these conditions within the waste mass. – How can they prove – caused this?

Further, the acceptance of High Moisture Content Waste (HMCW) is consistent with the permit. Although Advanced acknowledges that municipal waste water treatment sludge is a contributing factor to conditions at the site, those contributions are related to the decreasing permeability attributed to the integration of HMCW into the landfill, the soil classification of the on-site soils used as daily and intermediate cover, and the combined effect with continued waste placement activities, rather than the high moisture content and reduced strength of the waste. These conditions, however, can be managed with the engineering and operational measures that are being implemented. Further, as the University of Virginia testing described herein demonstrates, the addition of moisture does not diminish the strength properties of municipal solid waste (MSW). The more important consideration is the permeability and integrating systems to increase that permeability.

one obscure study does not negate the EPD report that states excess liquids are the cause

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**Observations and Immediate Corrective Actions**

In April 2018 Advanced initiated a slope reclamation project starting on the east slope of Cell 9 and progressing to the northeast corner of Cell 13. The filling pattern was intended to progress west to the northwest corner of Cell 14. In preparation for this filling pattern, Advanced proactively established monitoring points located throughout the northern portion of the landfill footprint for monthly surveys. These monitoring points were intended to assess waste conditions associated with the filling pattern.

On May 17, 2018, an Advanced employee observed cracks along the upper portion of the eastern slope of Cell 13. Per company protocols, the area where the cracks were observed was cleared and all personnel and equipment within the entire landfill footprint were evacuated until the cracks could be assessed. At this same time, Advanced received survey data indicating that the northern slope of Cell 13 had experienced horizontal movement on the order of 10 ft. Based on this information, Advanced made the decision to delay returning to normal operations for worker safety considerations until it installed monitoring devices to provide real-time information. On Monday May 21st, Advanced installed 7 Navstar GMS600 High Precision GPS/GNSS Sensors "Smart Stakes" to delineate the "Affected Area" from areas of the landfill that were confirmed to be stable. Once these were in place, Site operations resumed limited tonnage. Waste volumes have gradually increased over the past 30 days. Although survey data and visual cracking confirm movement has occurred, it is important to note that the slope has been maintained. How can they say the movement & cracking is no longer a problem? Advanced engaged Geosyntec Consultants, Inc. (Geosyntec) to provide slope stability analysis, on-site field engineering, and develop measures to stabilize the slope. Geosyntec has extensive experience analyzing waste stability issues at facilities with similar waste composition characteristics.

Based on conservative assumptions utilized in initial stability modeling, Geosyntec recommended the construction of a buttress berm and a leachate collection trench to stabilize the slope to achieve an acceptable factor of safety. Advanced initiated construction of the buttress berm on May 29th. Advanced has completed construction of the collection trench and expects to complete the construction of the berm the week of July 16th. Once work on the buttress berm is complete Advanced will focus on aggressively extracting perched leachate from within the waste. We have already installed additional vertical leachate extraction infrastructure in the unaffected area behind this slope to lower the phreatic surface within the waste mass. We will install additional wells immediately above the buttress berm once complete to drill to the stone pads that were brought through the fluff lift in Cell 13 in order to provide a hydraulic connection between the tip of the landfill gas well and the granular drainage layer of the liner system. Additional infrastructure may be installed to increase leachate removal dependent on the effectiveness of this initial work.

**Alleged Violations**

In the June 22nd NOV EPD alleges the following violations:

*Rule 391-3-4-.07(1)(i)1.requires a municipal solid waste landfill to be designed to ensure permanent slope stability. The Facility is not meeting this requirement of the Rules as evidenced by the*

*occurrence of slope instabilities observed throughout most of 2014 and by a separate instability that was observed beginning May 17, 2018.*

**Response:** Eagle Point Landfill was designed to meet the minimum requirements of the Georgia Solid Waste Rules and the Site continues to meet those requirements. Following the 2014 stability incident in Cell 8, Advanced re-evaluated the engineering design of the Site and enhanced components of the approved design to effectively manage the changing waste composition. It is important to note that the acceptance of high moisture content waste primarily in the form of sludges and liquid waste solidification is not a violation of the permit. Also, the presence of High Moisture Content Waste (HMCW) does not necessarily result in unstable conditions within the waste mass. Rather, the properties of HMCW alone must be distinguished from Low Shear Strength Waste (LSSW) and the ratio of the LSSW to MSW managed. Advanced recognizes that incorporating LSSW such as wastewater treatment plant sludge into MSW can alter the strength of waste. For this reason, Advanced controls the ratio of LSSW to MSW to ensure the strength of the waste in the landfill is adequate. Advanced also recognizes that incorporating LSSW with MSW presents additional challenges associated and incorporates engineering controls to ensure proper management of liquids and gases and stability of the waste. The following enhancements have been made since 2014 with a primary focus on improving drainage through the waste column, increased leachate management capabilities and storage, and reducing surface water infiltration:

| Year | Cell(s) | Component | Enhancement | Purpose |
|---|---|---|---|---|
| 2014 | Cells 8,9 | Intermediate Cover | Installation of 40 mil thick LLDPE Temporary Cover | Reduce surface water infiltration; Improve landfill gas collection efficiency |
| 2015 | Cell 13 | Liner Protective Cover | Change from 100% on site soil as 2 ft thick protective cover to hybrid of gravel and on site soil | Mitigate perched leachate above geocomposite |
| 2015 | Cell 13 | Landfill Gas System | Installation of gravel columns through initial waste lift for termination of landfill gas wells | Promote vertical drainage of liquids through waste column |
| 2016 | Cells 1,2,5,6,7,12 | Intermediate Cover | Installation of 40 mil thick LLDPE Temporary Cover | Reduce surface water infiltration; Improve landfill gas collection efficiency |
| 2016 | Cell 14 | Liner Protective Cover | Change from hybrid protective cover materials (on site soil/gravel) to all gravel protective cover | Improve drainage and management of leachate at base of liner system |
| 2017 | Cell 14 | Landfill Gas System | Conversion to caisson wells for landfill gas extraction | Provide vertical drainage continuously through the waste column during waste placement activities. Allows for landfill gas extraction in a timelier manner and reduces fugitive emissions. |

| Year | Cell(s) | Component | Enhancement | Purpose |
|---|---|---|---|---|
| 2017 | Cell 9,13 | Intermediate Cover | Installation of 40 mil thick LLDPE Temporary Cover | Reduce surface water infiltration; Improve landfill gas collection efficiency |
| 2017 | Leachate Tank Farm | Storage Tanks | Construction of third 250,000 gallon storage tank | Improve management of leachate |
| 2018 | Cell 8,9, 13 | Leachate Management | Installation of a 6"x10" dual contained forcemain | Improve management of leachate |

all of the above leduit work. The 5/17/18 issue happened

All enhancements have been implemented to specifically address additional landfill gas and leachate generation associated with an increased acceptance of municipal wastewater treatment plant sludge. In addition to these enhancements Advanced constructed 11.4 acres of final cover in 2015 to further mitigate surface water infiltration and improve landfill gas collection efficiency.

*Rule 391-3-4-.07 requires a municipal solid waste landfill to be designed by a Professional Engineer registered in Georgia to ensure permanent slope stability. The facility is accepting waste that does not fall within the range of design parameters used by the Professional Engineer to ensure permanent slope stability.*

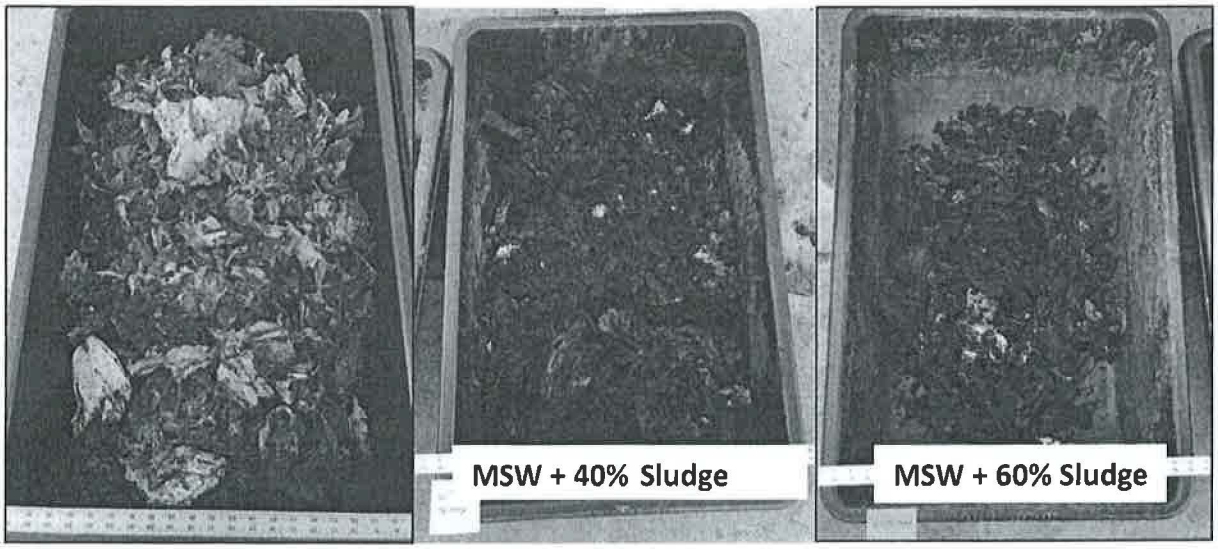
**Response:** The Site's acceptance of HMCW is consistent with the design parameters for the Site. Preliminary analyses performed by Geosyntec suggest that the primary cause of the movement in this area of the landfill is related to perched liquid, the phreatic surface, within the waste mass. After construction of the buttress berm is complete, additional investigation will be conducted to collect data from this area of the landfill in order to refine and confirm the assumptions used in performing slope stability modeling, including liquid pressures within the waste mass.

Invalid Study - the slope stability issues happened

The strength properties of the waste placed in the Eagle Point Landfill is not a significant factor in causing the observed movements on the northern area of the landfill in May 2018. Testing performed in 2017 at the University of Virginia (UVA) indicates that mixtures of MSW with sludge having characteristics similar to the wastewater treatment plant sludge accepted at Eagle Point have strength properties similar to MSW alone unless the LSSW to MSW ratios exceeds 40% (2.5:1 MSW to LSSW). The waste placed at the Eagle Point Landfill has a LSSW to MSW ration of 20% to 25%, well below 40%. Placement methods employed by the site ensured that the sludge was well mixed with the MSW and did not exceed the 40% threshold. These test results were based on samples collected during drilling of landfill gas wells using a bucket auger and the drilling of investigation borings using the sonic drilling technique at a facility with similar waste acceptance practices.

The UVA tests were conducted on samples collected directly from a landfill with similar waste acceptance practices using a bucket auger and sonic drilling techniques. Mixtures of MSW and LSSW containing 20%, 40%, 50%, 60%, 70%, and 80% LSSW (by total mass) were prepared and their strength and fluid transmission characteristics measured. Photographs of some of the mixtures are shown below. The waste transitions from a drier coarse material with large particles (100% MSW) to a finer and softer material at high LSSW content.

Large-scale direct shear tests were conducted on the mixtures following the methodology in Bareither et al. (2012) and ASTM D3080 using overburden stresses up to 170 kPa to simulate different depths of waste. Shear strength envelopes for the waste with varying LSSW content (0-100%) are shown in the figure below along with the envelope recommended for design of MSW landfills (dashed line) by Kavazanjian et al. (1995). The slope of the envelope is indicative of the shearing friction in the waste (steeper slope corresponds to waste with greater friction and higher strength). The slope is described by the friction angle ($\varphi'$). The intercept, corresponding to strength under no confinement, is the cohesion ($c'$). Wastes with higher $\varphi'$ and $c'$ have greater strength.

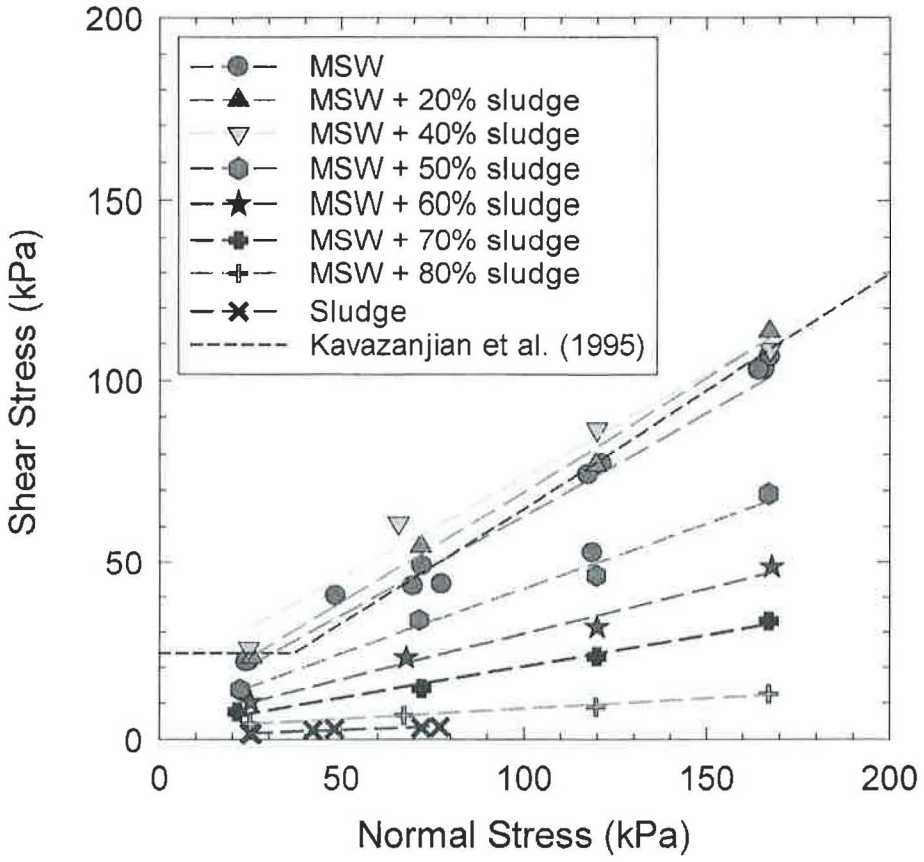



ASTM D3080/D3080M-11, Standard Test Method for Direct Shear Test of Soils Under Consolidated Drained Conditions.

Bareither, C., Breitmeyer, R., Bensen, C., Barlaz, M., and Edil, T. (2012), Deer Track Bioreactor Experiment: Field-Scale Evaluation of Municipal Solid Waste Bioreactor Performance, J. Geotech. and Geoenvironmental Eng., 138(6), 658-670.

Bareither, C., Benson, C., and Edil, T. (2012), Effects of Waste Composition and Decomposition on the Shear Strength of Municipal Solid Waste, *J. Geotech. and Geoenvironmental Eng.*, 138(10), 1161-1174.

Kavazanjian, E., Jr., Matasovic, N., Bonaparte, R., Schmertmann, G.R. (1995). Evaluation of MSW properties for seismic analysis. *Geoenvironment 2000, ASCE Geotechnical Special Publication #46*, Vol. 2, pp 97-102.




The data in the figure indicates that the MSW without LSSW has comparable strength as the generalized recommendation for strength of MSW in Kavazanjian et al. (1995). The test results also show that the strength is unaffected by LSSW content until the LSSW content exceeds 40%. At ratios exceeding 40%, the strength decreases (slope of the envelope, or φ′, decreases) as the LSSW content increases.

Upon completion of the buttress berm, Advanced plans on performing additional Cone Penetrometer Testing (CPT) within the Affected Area to better understand waste composition, map areas of low resistivity, confirm phreatic surface conditions, and evaluate the effectiveness of the corrective measures to stabilize the slope condition. Advanced also plans on mobilizing a sonic drill rig in order to collect site specific samples based on these CPT test results for direct shear testing at the University of Virginia in order to compare test results.

The UVA testing also showed that the LSSW content has a similar effect on fluid transmission, with the hydraulic conductivity of MSW-LSSW mixtures dropping when the LSSW content exceeds 40%. A waste mass with lower hydraulic conductivity transmits leachate and gas less efficiently, making leachate and gas removal more difficult, allowing perched or localized zones of leachate and gas to accumulate, and potentially forming zones of elevated liquid and gas pressure.

While the UVA tests showed that waste masses are still permeable ($10^{-3}$ cm/s) at a LSSW-MSW ratios comparable to those at Eagle Point Landfill (20-25%), the combination of LSSW and clayey soils used for daily and intermediate cover is believed to have reduced the hydraulic conductivity of the waste mass significantly. Excess daily and intermediate cover placed to mitigate odors is believed to have exacerbated this problem, severely limiting transmission of liquids and gases within the waste mass. The reduction in hydraulic conductivity becomes increasingly significant with depth, as the higher stress consolidates the waste rendering pathways for liquid and gas flow less permeable. These conditions result in pore water pressure increases that results in a decrease in the effective stress and shear resistance, potentially contributing to instability. No proof that daily dirt cover happened correctly Odor not reduced - Reports filed & on record at EPD. Advanced recognized that this phenomena may have been developing within the waste mass at the Site and integrated the aforementioned enhancements to mitigate this condition. When the effort to drill to the stone pads placed through the fluff lift in Cell 13 was not successful, Advanced integrated the caisson well design in Cell 14. The caisson wells have been more effective in attempting to achieve a drained condition within the waste mass. Advanced also aggressively expanded the landfill gas extraction system into Cells 13 and 14 well in advance of the regulatory mandated timeframe to allow for the vertical extraction of leachate and collection of landfill gas to mitigate internal waste pressures. Should Low Shear Strength Waste continue to be accepted in future cells at current volumes, Advanced will continue to evaluate whether a denser pattern of caisson wells, as well as any other modifications, are required to achieved a drained condition within the waste mass for permanent slope stability.

*Rule 391-3-4-.07 requires a municipal solid waste landfill to have a leachate collection system designed by a Professional Engineer registered in Georgia. The facility is being operated in a manner that does not fall within the design parameters used for leachate generation and management. The facility is routinely managing quantities of leachate that far exceed the maximum quantities assumed in the design signed by the Engineer.*

Recently collected leachate management data confirms that the Site is operating within the design parameters used for leachate generation and management. Advanced compared leachate management data collected between October 25, 2017 and July 3, 2018 with the design assumptions used in the original 1999 Permit Application and the 2006 Vertical Expansion Permit Application. The HELP Model output from the 1999 Permit Application estimated leachate generation rates of an average flow of 221 gallons/acre-day to a peak flow of 3,433 gallons/acre-day with 75 ft of waste in place and 12 inches of intermediate soil cover. NO The HELP Model output was used in calculating leachate collection system management capacity to confirm that no more than 12 inches of head would be present at the surface of the liner and to confirm leachate storage capacity.

The 2006 Vertical Expansion Permit Application utilized a leachate generation rate of 3,500 gallons/acre-day to demonstrate the collection system was capable of managing this volume. The data indicates that leachate management for Cell 13/14 is currently averaging 1,680 gallons/acre-day. For the entire landfill the average is 513 gallons/acre-day, including vertically extracted leachate. Three 250,000 gallon storage tanks provide approximately 12 days of storage capacity. The leachate generation is well below peak values that form the basis for the design in the 1999 and 2006 permit applications.

| Leachate Collection Data October 25, 2017 Through July 3, 2018 | | | | | | |
|---|---|---|---|---|---|---|
| Pump No. | Cells | Acres Draining to Sump | Average of Recorded Flow Rates (gpm) | Gallons of Leachate Using Average Flow Rate | Days | Gallons Per Acre Per Day |
| 1 | 1A/1B | 12.08 | 38 | 109,365 | 251 | 36 |
| 2 | 2A/2B | 11.14 | 29 | 1,055,340 | 251 | 377 |
| 3 | 8/7/6/5 | 39.69 | 68 | 1,115,806 | 251 | 112 |
| 4 | Wet Well Cell 8 | | 32 | 1,561,027 | 251 | |
| 5 | 9/10/11/12 | 39.96 | 49 | 3,599,360 | 251 | 359 |
| 6 | 13/14 | 19.87 | 55 | 8,378,618 | 251 | 1,680 |
| **Total** | | 122.74 | | 15,819,515 | 251 | 513 |

The 1999 Permit approved the recirculation of leachate within the landfill. This activity would significantly increase leachate volumes being managed on a daily basis. As waste composition changed and HMCW volumes increased, Advanced elected not to recirculate in these more recent phases.

Odors reported at 10, 11 4/12 pm at night disputes this

The actual volumes are not unexpected, are within leachate generation rates predicted during design, and are within the capacity of the system. As noted above, Advanced has enhanced the Site's leachate management infrastructure to meet increased HMCW volume.

*Permit Condition #13 for the facility requires operation in accordance with the approved Design and Operation Plan (D&O). The Facility is not operating in accordance with its D&O Plan; it is operating outside the parameters used by the Professional Engineer for the Facility's design.*

The Site is operating in a manner consistent with the D&O Plan and within the parameters used by the Professional Engineer for the Site's design. Advanced has incorporated additional engineering enhancements into the design to address leachate, landfill gas, and stability issues as a result of the changing waste composition.

*Rule 391-3-4-.07(3)(e) requires disposed solid waste to be covered daily. Solid waste at the Facility was not covered daily beginning May 17, 2018; cover was not re-established over all exposed solid waste until June 11, 2018.*

Advanced self-reported the daily cover issue on May 17th. As a result of the All-Stop implemented at the time the cracking was observed on the northeast corner of Cell 13, Advanced delayed daily cover placement due to the potential health and safety risk to our employees. On June 9th, the slope was safe for workers to access and at that time, Advanced applied a cementious based Posi-shell between June 8th and June 11th to the exposed waste to mitigate odors, prevent contact with surface water, and deter vectors. Advanced has received no complaints regarding odors emanating from the Site during the time period that the waste was uncovered. Advanced did not observe any vectors entering the Site during this time. Once Cell 13's slope is deemed safe to access with heavy equipment, the Affected Area will be

Reports were filed & on record at the EPD

regraded and 12 inches of intermediate cover applied until Cell 16 liner is constructed. No additional waste will be placed in the Affected Area until Cell 16 waste placement is initiated.

*Rule 391-3-4-.07(3)(f) requires landfills to control on-site populations of disease vectors; the Facility has failed to meet this requirement by leaving waste uncovered over multiple nights.*

Advanced monitored the uncovered waste on the north slope of Cell 13 and did not observe any vectors entering the area. The application of the Posi-shell has mitigated the potential for this to occur.

Posi-shell is sprayed on to the waste. It has numerous open areas.

*Rule 391-3-4-.07(3)(j) requires landfills to comply with surface water requirements of the Clean Water Act and to not violate requirements of area-wide or State-wide water quality management plans.*

Advanced has worked diligently to isolate surface water that has come in contact with leachate seeps in Cell 13. Seeps identified outside the Affected Area have been directed into the leachate collection system prior to leaving the landfill footprint. However, leachate from seeps on the north slope of Cell 13 have come in contact with surface water. In response, the sedimentation basin on the east side of the landfill has been partitioned into three sections to mitigate the discharge of surface water that may have come in contact with leachate. The center section of this sedimentation pond was isolated to store this surface water and prevent a discharge while allowing for the hauling and processing of this surface water at a wastewater treatment plant. Water in this center section is being aerated as personnel load and haul this surface water to the wastewater treatment plant. Advanced did experience a release of surface water through the overflow structure from the most northern section of the sedimentation basin as a result of two rain events exceed a total of 5 inches that occurred on June 27th and 28th. Prior to these events all surface water from this section of the pond had been pumped into the center section. However, soil that had come in contact with this surface water had not been removed prior to these rain events. Advanced sampled the discharge and is currently following the requirements of our discharge permit. Once all confined water has been hauled off site, the soil at the base of the ditches and the northern and center sections of the sedimentation basin will be removed and disposed of in the landfill.

* What happened with this leachate? Is it treated before discharge. Can we see the monitoring results?

Rain excuse later recanted.

**Corrective Actions**

Per the Notice of Violation EPD has required Advanced to perform a number of Corrective Actions to regain compliance with the Permit and the D&O Plan. Advanced is responding to those required Corrective Actions as follows:

*1) Henceforth, waste disposed at the facility must reasonably approximate the waste characteristics upon which the facility design is based. Reducing the amount of high moisture content waste received at the facility shall be necessary to achieve this.*

**Response:** As previously stated, acceptance of High Moisture Content Waste is allowed by the permit and is not a violation. As described above, mixtures of LSSW and MSW placed at ratios in the range used at Eagle Point Landfill (20-25%) have strength properties essentially the same as MSW alone. To manage HMCW, Advanced has already implemented a number of engineering enhancements to ensure future slope stability at the landfill.

*2) Leachate quantities in the landfill must be reduced by limiting the amount of high moisture content waste disposed. Massive quantities of high moisture content waste were not considered in the models of leachate generation used in the facility design.*

**Response:** Based on the leachate management data collected at the Site and the engineering enhancements incorporated into the design of the facility since the original permit was issued, the Eagle Point Landfill is capable of managing any increased leachate that may be produced by the acceptance of HMCW. at 8/24 meeting with AQ they acknowledged contracts for sludge has been cancelled - Thus knowingly & purposefully accepting prior to issue

*3) The landfill has more open area contributing to leachate generation than the design allows. The landfill must place additional acreage under final cover to comply with the design requirements.*

**Response:** With construction of Cell 15A the landfill footprint for the disposal of MSW will be approximately 130 acres. Advanced has constructed 11.4 acres of final cover to date, and has also installed approximately 48 acres of temporary 40 mil LLDPE. This results in an open area of approximately 70.56 acres which is consistent with the design and less than the "worst case scenario" used in the HELP model. The temporary cover employs a barrier consisting of the same material used in the final cover and provides comparable resistance to preventing surface water infiltration as the final cover. Nevertheless, Advanced will be installing additional temporary cover as other areas of the landfill achieve intermediate grades in order to minimize the open area that is contributing to the leachate generation.

*4) The Facility must demonstrate how runoff that contacted uncovered solid waste beginning May 17, 2018 was managed to meet the requirements of the Rules.* Must have proof!!!

As previously stated the exposed waste was covered with a heavy application of cementious based Posi-shell on June 8th through June 11th. Prior to this period surface water runoff from the area was confined to the northern section of the sedimentation basin on the east side of the landfill and managed in a manner consistent with surface water that had come in contact with leachate as previously discussed. The Posi-shell product prevented surface water contact with this waste after June 11th.

**Incorporation of Engineering Enhancements in Future Cells**

Advanced has already committed to utilization of gravel for the granular drainage layer in future cells. Advanced will also be incorporating the engineering enhancements discussed previously in future cells based on the ratio of MSW to the HMCW. At lower ratios a higher density of caisson wells (Radius Of Influence (ROI) less than the current landfill gas well spacing of 150 ft.) will be utilized in the waste mass. At a minimum caisson wells that will provide a conduit between the granular drainage layer and the waste column will be incorporated into all future cell construction projects. The caisson design will be enhanced by the placement of drainage stone in a radial pattern out from the caisson well on the waste surface prior to placement of the next lift of waste to increase the ROI of the higher density well pattern. We are currently evaluating the caisson well spacing in Cell 15 to ensure that as waste placement commences the higher density of caisson wells are achieved. Advanced will also be increasing the size of the stone pads on the fluff lift that the caisson wells will be built in order to allow for the drilling of wells in the event the

caisson well is damaged. The larger stone pad will allow for the tip of the conventional drilled landfill gas well to tag this stone pad and provide the conduit to the granular drainage layer. Providing a drained condition within the waste mass will mitigate pore pressures and promote stability for future permitted cells as well as the proposed expansion cells that buttress the Cells in which stability issues were required to be addressed.

Advanced will continue to install 40 mil Linear Low Density Polyethylene (LLDPE) on intermediate slopes to mitigate surface water infiltration to prevent exceeding the worse-case scenario assumed in the leachate generation analysis of the permit application for the facility.

Advanced would like to meet with EPD staff to discuss the incorporation of these systems into our D&O plan. After this meeting Advanced will update the D&O plan and submit for approval.

Currently in violation — DENY the application at EPD.

Please note that the information contained in this response was provided by both company and outside engineers and that I am forwarding this letter on the company's behalf. I believe the information provided in this response is consistent with our discussions in the meeting at your offices on May 22nd and with staff at the landfill on June 13th. If you have any questions or need additional information regarding this response please do not hesitate to contact me by telephone at (678) 386-1715

Sincerely,

Gerald Allen
South Region Landfill Manager

Attachment

cc: Chad Hall, GAEPD
William Cook, GAEPD
Melissa Bachhuber ADS
Randall Arnold, ADS
Charlie Gray, ADS
Jay Warzinski, ADS
Michael, Stowe, ADS
Michael, Stubbs, HHNT
Majdi Othman, Geosyntec
Meaghan Boyd, Alston